ECHORN LEARNING EXCHANGE WORKSHOPS (LEWs)

Learning Exchange Workshops, LEWs, are a learning opportunity for ECHORN members and their partner academic institution. The overall goal is to provide exposure to knowledge and aid the development of skills integral to the advancement of the research aims at each institution. The location of the LEW rotates across island sites and occurs at least once each year. LEWs feature 1-2 content areas for focus through seminars and workshops with visiting faculty. Content areas are driven by the site team and represent areas that need strengthening within the institution. LEWs are open to a maximum of 20 external faculty, graduate students, fellows and research professionals at the partner academic institution. Additionally, LEWs are open to all research staff in island sites within the ECHORN community. Sessions are available for live viewing on FUZE and archived for future reference.

Guidelines for ECHORN Coordinating Center (ECC)/Sites

LEWs are a collaborative effort between the ECC and site teams. Site teams are responsible for the following:

- 1. Identifying the content area for the workshop
- 2. Advertising the LEW
- 3. The application, acceptance and confirmation process for LEW participation
- 4. Securing the meeting space for the workshop

The ECC is responsible for the following:

- 1. Securing the visiting faculty
- 2. Preparing and providing the workshop materials
- 3. Evaluating the workshop
- 4. Posting workshop materials to the ECHORN Virtual Curriculum to allow other ECHORN members to access the LEWs.

Each LEW participant is provided with a booklet of all the materials (slides, exercises, literature, etc.) being covered in the workshop, in addition to a folder that contains an ECHORN pen, ECHORN notebook, biographical description of the lecturer and brief description of the ECHORN project.

Guidelines for Lecturers (Workshop Leads)

Lecturers for the LEWs are encouraged to use an active learning teaching strategy that balances didactic lectures and hands on components (e.g. labs, group discussions, group assignments, exercises, etc.). Additionally, lecturers are asked to provide participants with objectives for the workshop and use practical examples to illustrate the material being taught, so that participants will be able to translate the knowledge and skills learnt during the workshop to their research/studies. Lecturers are asked to tailor the workshop to the level of the participants as best as possible.

BARBADOS LEW DESCRIPTION

ECHORN Barbados hosted its first LEW, February 28-March 1 2013. The topic, *Introduction to Statistical Thinking and Analyzing Data in SPSS*, was selected for two primary reasons: a) quantitative skills was previously identified as an area in need of strengthening at the institution and b) SPSS is one of the two software programs readily accessible to researchers and health professionals at the institution.

The Barbados LEW had two main aims:

- 1. To provide an introduction to basic statistical concepts such as distribution, measures of central tendency, bivariate analyses (t-test, ANOVA, Chi-square, Correlations) and multivariate analyses (linear and logistic regression).
- 2. To provide attendees with the tools needed to perform the statistical concepts outlined above in SPSS using sample datasets.

The ECC selected Dr. Mayur Desai, Associate Professor of Epidemiology at Yale University as the workshop course leader. Dr. Desai is a member of the ECHORN Faculty Advisory Board. He currently teaches a course on applied analytic methods at the Yale School of Public Health and has taught several specially designed short courses in statistics and research methods in Ethiopia for the Global Health Leadership Institute (GHLI). A biographical description of Dr. Desai has been included in the Appendix.

To participate in the Barbados LEW, participants were asked to bring their laptop with SPSS.

The Barbados LEW followed the schedule below:

LEW: Introduction to Statistical Thinking and Analyzing Data in SPSS Dr. Mayur Desai, Associate Professor of Epidemiology,Yale University The Solutions Center, UWI-Cave Hill, BarbadosDay 1 Thursday February 28, 20138:30-9:00amRegistration9:00am-10:30amBasic Statistical Measures10:30am-11:00amMorning Coffee Break11:00am-12:30pmT-test, Paired T-test, Anova, Chi-square test12:30pm-3:30pmLunch1:30pm-3:30pmChi-square Test3:00pm-3:30pmCorrelationsDay 2 Friday March 1, 20138:30am-9:00amReview of Day 1 Material9:00am-10:30amSimple Linear Regression10:30am-11:00amMorning Coffee Break			
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12:30pm-1:30pm Lunch	12:30pm-1:30pm	Lunch	
1:30pm-3:00pm Logistic Regression	1:30pm-3:00pm	Logistic Regression	
3:00pm- 3:15pm Wrap up and complete LEW evaluation	3:00pm- 3:15pm	Wrap up and complete LEW evaluation	

Approximately 15 persons participated in the Barbados LEW; 4 were members from team Barbados, 10 indicated that they were lecturers in the department of medicine or medical residents and one attendee identified himself as an advisor for family/community health section of the PAHO office in Barbados. The attendees ranged from having no experience with statistics or SPSS to having moderate experience with both.

PUERTO RICO LEW DESCRIPTION

ECHORN Puerto Rico hosted its first LEW, March 5-6, 2013. The topic, *Introduction to Social Network Analysis*, was selected for two primary reasons: a) no knowledge of the topic currently exists at the institution and b) ECHORN is incorporating some social network methods into its parent study.

The Puerto Rico LEW had one main aim:

1. To provide an introduction to the theories, measures and methodological approaches to social network analysis. This introduction will include the use of examples from the literature to illustrate past and present use of social network analyses. A limited introduction will be given to analytic methods and software used with social network analysis.

The ECC selected Dr. Jason Fletcher, Associate Professor of Health Policy at Yale University as the workshop course leader. Dr. Fletcher's research focuses on examining social network effects on adolescent education and health outcomes and he teaches courses at the University on social network analysis. A biographical description of Dr. Fletcher has been included in the Appendix.

There were no pre-requisites for participation in the Puerto Rico LEW.

The Puerto Rico LEW followed the schedule below:

LEW: Introduction to Social Network Analysis		
Dr. Jason M Fletcher, Associate Professor of Health Policy Yale University		
Faculty Meeting Room, Medical Sciences Campus, San Juan, Puerto Rico Day 1 Tuesday March 5, 2013		
10:00am-10:15am	Registration: SNA Workshop	
10:15am-11:00am	Introduction	
11:00am-12:00pm	Social Network Approach	
12:00pm-1:00pm	Lunch	
1:00pm-2:00pm	Definitions and Measures	
2:30pm-2:45pm	Coffee Break	
2:45pm- 5:00pm	Theory and Concepts	
Day 2 Wednesday March 6, 2013		
9:00am-9:45am	Data Collection and Examples	
9:45am-10:00am	Coffee Break	
10:00am-12:00pm	Data Collection and Examples	
12:00pm-1:00pm	Lunch	
1:00pm-2:45pm	Empirics I	
2:45pm-3:45pm	Empirics II	

U.S. VIRGIN ISLANDS LEW DESCRIPTION

ECHORN:US Virgin Islands (USVI) hosted its first LEW, April 3-4 2014. The topic, *Making your research relevant, Applying the research process and principles*, was selected for two primary reasons: a) the University of Virgin Islands does not have a robust research component and b) the desire to ensure research being conducted aligns with community needs across the islands.

The USVI LEW had several aims:

- 1. To provide attendees with the skills needed to develop relevant research questions and hypotheses
- 2. To provide attendees with the skills needed to determine appropriate study designs for their research question
- 3. To explain the purpose and value of a community needs assessment as an inherent part of the research process
- 4. To familiarize attendees with various data collection methods
- 5. To conduct a needs assessment within his/her area of research interest.

The ECC selected Dr. Terri-Ann Thompson, Associate Research Scientist at Yale University School of Medicine as the workshop course leader. Dr. Thompson is the Director of the ECHORN Coordinating Center. She is a trained public health researcher from Johns Hopkins Bloomberg School of Public Health. She has guest lectured at Yale University and Southern Connecticut State University. A biographical description of Dr. Thompson has been included in the appendix.

The USVI LEW followed the schedule below:

Making Your Research Relevant: Applying the Research Process and Principles Dr. Terri-Ann Thompson, Associate Research Scientist, Yale University School of Medicine University of the Virgin Islands, St. Thomas

Day 1 Thursday April 3, 2014	
8:30-9:00am	Registration
9:00am-10:30am	Research Questions & Hypotheses
10:30am-11:00am	Morning Coffee Break
11:00am-12:30pm	Data Sources and Study Design
12:30pm-1:30pm	Lunch
1:30pm-3:00pm	Community Needs Assessment: Definition & Step One
3:00pm-3:30pm	Afternoon Break
3:30pm- 4:30pm	Community Needs Assessment: Step Two
Day 2 Friday April 4, 2014	
9:00am-9:30am	Review of Day 1
9:30am-10:30am	Community Needs Assessment: Step Three
10:30am-12:00pm	Community Needs Assessment: Step Four & Data Collection Methods
12:00pm-1:00pm	Community Needs Assessment: Step Five & Six

Twenty (20) persons participated in the USVI LEW on the first day and thirteen (13) on the second day. Of the eight persons who reported their title, six were in faculty positions at the University and the remaining were staff- including one librarian and one nurse. The workshop was held on the St. Thomas campus of the University of the Virgin Islands and videocast to participants on the St. Croix campus. Although not formally reported, there were also nursing students and community advisory board members among the attendees. The attendees ranged from having no experience to moderate experience with research methodology and conduct. Few attendees had any knowledge of community needs assessment, while no attendee had previous experience conducting an assessment.